

ABSTRACT OF THE DISCLOSURE

In order to achieve an as uniform as possible temperature over the entire surface of the substrate (2) during a temperature step and, in particular, during an epitaxy method, temperature equalization structures are incorporated in a substrate holder (1), on which the substrate (2) is located. A uniform temperature distribution on the substrate surface during the deposition of a semiconductor material reduces the emission wavelength gradient of the deposited semiconductor material. The temperature equalization structures produce specific temperature inhomogenelties in the substrate holder (1), and these smooth out the temperature profile of the substrate (2). For example, a groove (4) with a cooling effect and a support step (5) which produces a gap (8) between the substrate (2) and the substrate holder (1) are integrated in the edge area of the substrate holder (1).